

## PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To: Glen R. Farbanish  
 Cantor Fitzgerald, L.P.  
 Innovation Division  
 110 East 59th Street, 6th Floor  
 New York, NY 10022

**PCT**NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL SEARCH REPORT AND  
THE WRITTEN OPINION OF THE INTERNATIONAL  
SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

		Date of mailing (day/month/year)	<b>15 FEB 2008</b>
Applicant's or agent's file reference 07-2101WO	<b>FOR FURTHER ACTION</b> See paragraphs 1 and 4 below		
International application No. PCT/US 07/60295	International filing date (day/month/year) 09 January 2007 (09.01.2007)		
Applicant ESspeed, Inc.			

1.  The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

## Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes  
1211 Geneva 20, Switzerland, Facsimile No.: +41 22 740 14 35

For more detailed instructions, see the notes on the accompanying sheet.

2.  The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

3.  With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

## 4. Reminders

Shortly after the expiration of 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/I/B/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer:  Lee W. Young
PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774	

## PATENT COOPERATION TREATY

**PCT****INTERNATIONAL SEARCH REPORT**

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 07-2101WO	<b>FOR FURTHER ACTION</b>	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/US 07/60295	International filing date (day/month/year) 09 January 2007 (09.01.2007)	(Earliest) Priority Date (day/month/year) 09 January 2006 (09.01.2006)
Applicant ESpeed, Inc.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of:

- the international application in the language in which it was filed.  
 a translation of the international application into \_\_\_\_\_ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

b.  This international search report has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)).

c.  With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2.  Certain claims were found unsearchable (see Box No. II).

3.  Unity of invention is lacking (see Box No. III).

## 4. With regard to the title,

- the text is approved as submitted by the applicant.  
 the text has been established by this Authority to read as follows:

## 5. With regard to the abstract,

- the text is approved as submitted by the applicant.  
 the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

## 6. With regard to the drawings,

- a. the figure of the drawings to be published with the abstract is Figure No. 4  
 as suggested by the applicant.  
 as selected by this Authority, because the applicant failed to suggest a figure.  
 as selected by this Authority, because this figure better characterizes the invention.
- b.  none of the figures is to be published with the abstract.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/60295

A. CLASSIFICATION OF SUBJECT MATTER  
IPC(8) - G06Q 40/00 (2007.01)

USPC - 705/37

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
USPC - 705/37Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
USPC - 705/1, 35, 36R, 37; 700/1, 90 -- text search, see search terms belowElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
PubWEST(PGPB,USPT,USOC,EPAB,JPAB); DialogPRO(Engineering); Google Scholar

Search Terms Used: -- Please see extra sheet --

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004/0210512 A1 (FRASER et al.) 21 October 2004 (21.10.2004), entire document especially Figs 1, 2, 3, 4, 6, 8, 10, 12; para [0008], [0031], [0034], [0037]-[0038], [0048], [0057], [0059], [0062], [0069], [0074], [0082]-[0084], [0094]-[0095], [0101]-[0104], [0110], [0114], [0118]-[0120].	1-27 and 29-47 ----- 28
Y	US 2005/0216393 A1 (LUTNICK et al.) 29 September 2005 (29.09.2005), especially Fig 2; para [0028].	28
A	US 2005/0160032 A1 (LUTNICK et al.) 21 July 2005 (21.07.2005), especially Figs 4, 11.	1-47

 Further documents are listed in the continuation of Box C.

- \* Special categories of cited documents:
  - "A" document defining the general state of the art which is not considered to be of particular relevance
  - "E" earlier application or patent but published on or after the international filing date
  - "L" document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
  - "O" document referring to an oral disclosure, use, exhibition or other means
  - "P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "G" document member of the same patent family

Date of the actual completion of the international search

28 September 2007 (28.09.2007)

Date of mailing of the international search report

15 FEB 2008

Name and mailing address of the ISA/US  
Mail Stop PCT, Attn: ISA/US, Commissioner for Patents  
P.O. Box 1450, Alexandria, Virginia 22313-1450  
Facsimile No. 571-273-3201Authorized officer:  
Lee W. Young  
PCT Helpdesk: 571-272-4300  
PCT OSP: 571-272-7774

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/60295

## Continuation of B. FIELDS SEARCHED:

Search Terms Used: trade or trading, system, priority or prioritize, right or privilege, exclusive or exclusivity, offer or bid, size or volume or amount or yield or percent or percentage or delta, criteria or requirement, state or status, phase, right or authority or authorization or privilege, first, on, first on, follow, first-on-the-follow, contra, order, priority or prioritization or exclusive or exclusivity, right or authorization, contra or match or matching or matched or pair or paired, order or offer or bid, award or incentive, award or reward

## PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To: Glen R. Farbanish  
Cantor Fitzgerald, L.P.  
Innovation Division  
110 East 59th Street, 6th Floor  
New York, NY 10022

PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

		Date of mailing (day/month/year)	15 FEB 2008
Applicant's or agent's file reference 07-2101WO		FOR FURTHER ACTION See paragraph 2 below	
International application No. PCT/US 07/60295	International filing date (day/month/year) 09 January 2007 (09.01.2007)	Priority date (day/month/year) 09 January 2006 (09.01.2006)	
International Patent Classification (IPC) or both national classification and IPC IPC(8) - G06Q 40/00 (2007.01) USPC - 705/37			
Applicant ESpeed, Inc.			

## 1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

## 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66 1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

## 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Date of completion of this opinion 28 September 2007 (28.09.2007)	Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774
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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US 07/60295

**Box No. I Basis of this opinion**

1. With regard to the language, this opinion has been established on the basis of:
    - the international application in the language in which it was filed.
    - a translation of the international application into \_\_\_\_\_ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
  2.  This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
  3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been established on the basis of:
    - a. type of material
      - a sequence listing
      - table(s) related to the sequence listing
    - b. format of material
      - on paper
      - in electronic form
    - c. time of filing/furnishing
      - contained in the international application as filed
      - filed together with the international application in electronic form
      - furnished subsequently to this Authority for the purposes of search
  4.  In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

**WRITTEN OPINION OF THE  
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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	28	YES
	Claims	1-27 and 29-47	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-47	NO
Industrial applicability (IA)	Claims	1-47	YES
	Claims	None	NO

**2. Citations and explanations:**

Claims 1-27 and 29-47 lack novelty under PCT Article 33(2) as being anticipated by US 2004/0210512 A1 to Fraser et al. (hereinafter "Fraser").

Regarding claim 1, Fraser discloses a method comprising: transitioning an electronic trading system (see Fig 1) from a first state to a second state (see Fig 3 and para [0034] -- e.g., thirteen states and transitions between states); and awarding a participant with trading priority in the second state with respect to an incoming contra order, when the participant satisfies a status of trading rights in the first state and when one or more predetermined criteria in the second state are satisfied (see Figs 3, 4, 6 and para [0059] -- e.g., the first state being "participant qualification state 304", and the second state being "bid/offer state 306", the transition from the participant qualification state 304 to the bid/offer state 306 occurring via the "command state 330" as illustrated in steps 412 and 416 of Fig 4 and step 642 of Fig 6; the participant establishing trading priority in the second, i.e., bid/offer, state by placing a bid or offer at a select, e.g., predetermined, price and volume).

Regarding claim 2, Fraser further discloses in which the first state comprises a state that allows trading and negotiation between participants (see Fig 3 -- "price improvement state 314"), and in which the second state comprises a bid/offer state (see Fig 3 -- "bid/offer state 308").

Regarding claim 3, Fraser further discloses in which the trading priority comprises a right to exclusively trade on the incoming contra order (see para [0082]).

Regarding claim 4, Fraser further discloses allowing all participants to trade on the incoming contra order if the participant is not awarded with trading priority (see para [0104] -- e.g., allowing all non-priority passive traders to trade).

Regarding claim 5, Fraser further discloses in which the status of trading rights in the first state comprises rights based on a prioritization of existing orders (see Fig 3 -- "participant qualification state 304", para [0048] -- e.g., participants are classified based on a metric used to monitor a participant's activity, and the metric may take into account factors such as the number of trades made by the participants; it is reasonable to infer that one classification may be participants having made a number of trades equal to zero, i.e., no trades).

Regarding claim 6, Fraser further discloses in which the participant satisfies the status of trading rights in the first state when the participant has a best order from among one or more existing orders (see para [0104] -- "the initial "best" passive trader").

Regarding claim 7, Fraser further discloses in which the participant satisfies the status of trading rights in the first state when the participant made a trade in the first state (see para [0048] -- e.g., participants are classified based on a metric used to monitor a participant's activity, and the metric may take into account factors such as the number of trades made by the participants; it is reasonable to infer that one classification may be participants having made a number of trades equal to zero, i.e., no trades).

Regarding claim 8, Fraser further discloses in which the participant satisfies the status of trading rights in the first state when the participant made in the first state a trade that also satisfies a minimum size requirement (see para [0062] -- "A second type of priority is also granted if a bid/offer qualifies with regard to a minimum size definition").

Regarding claim 9, Fraser further discloses in which the one or more predetermined criteria in the second state are satisfied when a size of an order in the second state and associated with the participant satisfies a minimum size requirement (see para [0062] -- "A second type of priority is also granted if a bid/offer qualifies with regard to a minimum size definition").

Regarding claim 10, Fraser further discloses in which the order associated with the participant comprises at least one of: an existing order (see Fig 3 -- "participant qualification state 304", para [0048] -- e.g., participants are classified based on a metric used to monitor a participant's activity, and the metric may take into account factors such as the number of trades and/or amount of trades of the participant's existing orders), and an order subsequently entered, in the second state, by the participant (see Figs 3, 6, 8 and para [0074], [0082]-[0083] -- e.g., the system temporarily transitions to the "qualified workup state 312" which gives exclusive rights to trade to the initial trader, who is recognized as a qualified current worker able to control the trade by submitting subsequent, additional transaction volume).

-- Please see Supplemental Box --

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

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**Supplemental Box**

**In case the space in any of the preceding boxes is not sufficient.**

Continuation of:

Box V.2: Citations and explanations:

Regarding claim 11, Fraser further discloses in which the one or more predetermined criteria in the second state are also satisfied when the size of the order associated with the participant exceeds a percentage of a size of the incoming contra order (see para [0062] – e.g., discourage order and execution fragmentation; para [0118] – ‘meet a given percentage of the requester’s size’).

Regarding claim 12, Fraser further discloses in which the one or more predetermined criteria in the second state are also satisfied when a price of the order associated with the participant is within a delta of a price of the incoming contra order (see Fig 3; para [0057] – e.g., in the ‘Instrument creation state 306’, a participant may create an instrument using a delta and thereafter submit the instrument to the bid/offer state 308 for trading).

Regarding claim 13, Fraser further discloses in which the one or more predetermined criteria in the second state are also satisfied when a size of the incoming contra order satisfies at least a minimum size requirement (see para [0084] – ‘If the size of the bid/offer and/or hit/take is below the system-controlled threshold’).

Regarding claim 14, Fraser further discloses in which the one or more predetermined criteria in the second state are also satisfied when a price of the order associated with the participant is within a delta of a price of a trade in the first state (see Fig 3; para [0057] – e.g., in the ‘Instrument creation state 306’, a participant may create an instrument using a delta and thereafter submit the instrument to the bid/offer state 308 for trading; para [0037], [0069] – e.g., the trade in the first state being a partial execution and the trade in the second state being a follow-on trade, such as a second trade in a sequence of trades as per the definition of ‘Trade’ of para [0037], of the remaining size of the order, the price obtained during execution of the trade in the first state providing an initial asking price for the trade to be executed in the second state).

Regarding claim 15, Fraser further discloses in which awarding the participant with trading priority further comprises awarding the participant with trading priority when the participant made a trade in the first state that satisfies a minimum size requirement (see para [0062] – ‘A second type of priority is also granted if a bid/offer qualifies with regard to a minimum size definition’).

Regarding claim 16, Fraser further discloses in which the one or more predetermined criteria in the second state are satisfied when a price of an order in the second state and associated with the participant satisfies a price criteria with respect to a price of a trade in the first state (see Fig 10 and para [0037], [0059], [0102]-[0104] – e.g., the trade in the first state being a partial execution of the trade in the second state being a follow-on trade, such as a second trade in a sequence of trades as per the definition of ‘Trade’ of para [0037], of the remaining size of the order, the price obtained during execution of the trade in the first state providing an initial asking price for the trade to be executed in the second state; the one or more predetermined criteria in the second state being satisfied when, for example, the initial ‘best’ passive trader matches an aggressor’s price, the aggressor’s price being better than the initial asking price).

Regarding claim 17, Fraser further discloses in which the price criteria comprises the price of the order associated with the participant being within a delta of the price of the trade in the first state (see Fig 3; para [0057] – e.g., in the ‘Instrument creation state 306’, a participant may create an instrument using a delta and thereafter submit the instrument to the bid/offer state 308 for trading; para [0037], [0069] – e.g., the trade in the first state being a partial execution and the trade in the second state being a follow-on trade, such as a second trade in a sequence of trades as per the definition of ‘Trade’ of para [0037], of the remaining size of the order, the price obtained during execution of the trade in the first state providing an initial asking price for the trade to be executed in the second state).

Regarding claim 18, Fraser further discloses in which the one or more predetermined criteria in the second state are satisfied when a size of an order in the second state and associated with the participant exceeds a percentage of a size of the incoming contra order (see para [0082] – e.g., discourage order and execution fragmentation; para [0118] – ‘meet a given percentage of the requester’s size’).

Regarding claim 19, Fraser further discloses in which the one or more predetermined criteria in the second state are satisfied when a price of an order in the second state and associated with the participant is within a delta of a price of the incoming contra order (see Fig 3; para [0057] – e.g., in the ‘Instrument creation state 306’, a participant may create an instrument using a delta and thereafter submit the instrument to the bid/offer state 308 for trading).

Regarding claim 20, Fraser further discloses in which awarding the participant with trading priority further comprises awarding the participant with trading priority when the participant satisfies one or more transaction criteria in the first state (see Fig 3 – ‘participant qualification state 304’, para [0048] – e.g., participants are classified based on a metric used to monitor a participant’s activity, and the metric may take into account factors such as the number of trades and/or amount of trades made by the participant).

Regarding claim 21, Fraser further discloses in which the participant satisfies the one or more transaction criteria in the first state when the participant made a trade in the first state that satisfies a minimum size requirement (see para [0062] – ‘A second type of priority is also granted if a bid/offer qualifies with regard to a minimum size definition’).

Regarding claim 22, Fraser further discloses in which the one or more predetermined criteria in the second state are satisfied when at least one of: a size of the incoming contra order satisfies at least a minimum size requirement (see para [0084] – ‘If the size of the bid/offer and/or hit/take is below the system-controlled threshold’), and a size of the incoming contra order exceeds a percentage of a size of an order associated with the participant (see para [0062] – e.g., discourage order and execution fragmentation; para [0118] – ‘meet a given percentage of the requester’s size’).

– Please see Supplemental Box –

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No. PCT/US 07/60295
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**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation off:  
Box No. V.2: Citations and explanations:

Regarding claim 23, Fraser discloses an apparatus comprising a computing device operable to perform the method of claim 1 (see Fig 2 and para [0031] -- 'server 206').

Regarding claim 24, Fraser discloses a computer readable medium comprising a program that when executed performs the method of claim 1 (see para [0008] -- 'data processing system having control logic').

Regarding claim 25, Fraser discloses a method comprising: transitioning a trading system (see Fig 1) from a first state to a second state (see Fig 3 and para [0034] -- e.g., thirteen states and transitions between states); and awarding a first participant and a second participant with trading priority in the second state with respect to an incoming contra order when the second participant satisfies the status of trading rights in the first state (see Figs 3, 4, 6 and para [0059] -- e.g., the first state being 'participant qualification state 304', and the status of trading being 'bid/offer state 308', the transition from the participant qualification state 304 to the bidoffer state 308 occurring via the 'command state 330' as illustrated in steps 412 and 416 of Fig 4 and step 542 of Fig 6, the first and second participants being initial traders); and awarding the second participant with exclusive trading priority in the second state with respect to the incoming contra order if the second participant subsequently enters, in the second state, the order that satisfies one or more predetermined criteria (see Figs 3, 6, 8 and para [0074], [0082]-[0083] -- e.g., the second participant temporarily transitions to the 'qualified workshop state 312' which gives exclusive rights to trade to the initial trader, e.g., the second participant, who is recognized as a qualified current worker able to control the trade by submitting additional transaction volume to its contra-traders to the exclusion of outside participants, e.g., subject to one or more predetermined criteria including reaching a specified limit on the number of workups or amount of workups).

Regarding claim 26, Fraser further discloses in which the second participant satisfies the status of trading rights in the first state when the second participant has no existing best order and made a trade in the first state (see Fig 3 -- 'participant qualification state 304', para [0048] -- e.g., participants are classified based on a metric used to monitor a participant's activity, and the metric may take into account factors such as the number of trades and/or amount of trades, for example, of the participant's existing orders, trades made, or a combination thereof; it is reasonable to infer that the metric may be based on at least two factors, one factor being the number of existing orders equaling zero best orders and another factor being the number of participant's trades made equaling a number greater than zero).

Regarding claim 27, Fraser further discloses in which the second participant satisfies the status of trading rights in the first state when the second participant has no existing best order and made, in the first state, a trade and also satisfies a minimum size requirement (see Fig 3 -- 'participant qualification state 304', para [0048], [0062] -- e.g., participants are classified based on a metric used to monitor a participant's activity, and the metric may take into account factors such as the number of trades and/or amount of trades, for example, of the participant's existing orders, trades made, or a combination thereof; it is reasonable to infer that the metric may be based on at least three factors, one factor being the number of existing orders equaling zero best orders, a second factor being the number of participant's trades made equaling a number greater than zero, and a third factor being the trade(s) made satisfying a minimum size definition).

Regarding claim 28, Fraser further discloses in which awarding the first participant and the second participant with trading priority in the second state comprises awarding the first participant and the second participant with trading priority for at least one of a predetermined time period (see para [0083] -- 'The status of current worker may terminate upon ... the lapse of the trading inactivity interval'), and up to the second participant entering, in the second state, the order that satisfies the one or more predetermined criteria (see Fig 3; para [0094]-[0095] -- e.g., the second state being the 'price retention state 316', and the second participant being the aggressor satisfying the one or more predetermined criteria by hitting or lifting the bid or offer at the new price').

Regarding claim 30, Fraser further discloses awarding the first participant with exclusive trading priority in the second state if the second participant does not subsequently enter the order that satisfies the one or more predetermined criteria (see Fig 3 -- 'when state 312', para [0110] -- e.g., the second participant being 'the first best qualified bidder/offerer', who 'will maintain priority only if it responds at its price, or if necessary, matches the best When Take price', i.e., else the second participant loses its trading priority in the second state and thus the first participant is awarded exclusive trading priority in the second state).

Regarding claim 31, Fraser further discloses in which the second participant has a predetermined time period to subsequently enter the order that satisfies the one or more predetermined criteria (see para [0083] -- 'by the lapse of the trading inactivity interval').

Regarding claim 32, Fraser further discloses in which the one or more predetermined criteria comprises the subsequently entered ordered satisfying a minimum size requirement (see para [0084] -- 'If the size of the bid/offer and/or hit/take is below the system-controlled threshold').

Regarding claim 33, Fraser discloses an apparatus comprising a computing device operable to perform the method of claim 25 (see Fig 2 and para [0031] -- 'server 206').

Regarding claim 34, Fraser discloses a computer readable medium comprising a program that when executed performs the method of claim 25 (see para [0008] -- 'data processing system having control logic').

-- Please see Supplemental Box --

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No. . PCT/US 07/60295
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**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of  
Box V.2. Citations and explanations:

Regarding claim 35, Fraser discloses a method comprising: transitioning an electronic trading system (see Fig 1) from a first state to a second state (see Fig 3 and para [0034] – e.g., thirteen states and transitions between states, the first state being ‘participant qualification state 304’, and the second state being ‘qualified workup state 312’; the transition occurring via the ‘command state 330’); awarding a participant with a right to exclusively trade on an incoming contra order in the second state, the second participant having an order in the second state (see Fig 8 and para [0082]-[0083] – e.g., transitioning to the ‘qualified workup state 312’ gives exclusive rights to trade to the initial trader, e.g., the second participant, who has an order in the second state, e.g., the initial order); and automatically modifying the participant’s order when the contra order meets one or more predetermined criteria, in which modifying the participant’s order does not affect the participant’s trading priority in the second state (see Figs 3, 12 and para [0119]-[0120] – e.g., transitioning via command state 330 to the ‘restore state 320’, which allows a participant to automatically be the best bidder/ooffer for a given size as determined by one or more predetermined criteria, e.g., a metric).

Regarding claim 36, Fraser further discloses in which the participant’s order comprises at least one of: an existing order (see Fig 3 – ‘participant qualification state 304’, para [0048] – e.g., participants are classified based on a metric used to monitor a participant’s activity, and the metric may take into account factors such as the number of trades and/or amount of trades of the participant’s existing orders), and an ordered entered, in the second state, by the participant (see Figs 3, 6, 8 and para [0074], [0082]-[0083] – e.g., the system temporarily transitions to the ‘qualified workup state 312’ which gives exclusive rights to trade to the initial trader, who is recognized as a qualified current worker able to control the trade by submitting subsequent, additional transaction volume).

Regarding claim 37, Fraser further discloses in which modifying the participant’s order comprises at least one of: modifying the size of the order (see Fig 3 – ‘restore state 320’, para [0120] – ‘automatically control quantitatively bids/offers. For example, decrease a bid by 10%, and modifying a price of the order (see para [0119] – automatically restoring the same size bid at the same price without having to re-input the bid command’, to restore meaning ‘to replicate a bid upon that bid being hit’).

Regarding claim 38, Fraser further discloses in which modifying the order comprises removing the order (see para [0101] – ‘bids and offers that are entered and are then quickly removed’).

Regarding claim 39, Fraser further discloses in which modifying the participant’s order comprises modifying the participant’s order upon at least one of: awarding the participant with the right to exclusively trade (see Fig 3 and para [0082]-[0083], [0119] – e.g., a participant may be awarded the status of qualified current worker during the qualified workup state 312 and the system may thereafter transition to the price improvement state 314 at which the participant may modify its order), and an input of the incoming contra order (see Fig 10 and para [0102] – e.g., modifying the order in response to an aggressor’s placing a bid or offer at a price worse than the best price bid or offered by another participant).

Regarding claim 40, Fraser further discloses in which the one or more predetermined criteria comprise at least one of: a minimum size requirement (see para [0084] – ‘If the size of the bid/ooffer and/or hi/take is below the system-controlled threshold’), and a price requirement (see Fig 10 – ‘Has a maker matched this trade?’, e.g., matched the price requirement).

Regarding claim 41, Fraser further discloses automatically causing the participant to trade on the incoming contra order when another participant indicates a willingness to trade on the incoming contra order (see Figs 3, 8, 10 and para [0102]-[0104], [0114] – e.g., going to ‘price improvement state 314’ via steps 808 and 810 of Fig 8 when another participant, e.g., an aggressor, has indicated a willingness to trade, and consummating the trade if the initial ‘best’ passive trader does not match the new better price, e.g., at step 1022 of Fig 10).

Regarding claim 42, Fraser discloses an apparatus comprising a computing device operable to perform the method of claim 35 (see Fig 2 and para [0031] – ‘server 206’).

Regarding claim 43, Fraser discloses a computer readable medium comprising a program that when executed performs the method of claim 35 (see para [0008] – ‘data processing system having control logic’).

Regarding claim 44, Fraser discloses a method comprising: transitioning an electronic trading system (see Fig 1) from a first state to a second state (see Fig 3 and para [0034] – e.g., thirteen states and transitions between states); receiving a contra order in the second state (see Fig 3 – ‘bid/ooffer state 310’, para [0082]-[0083] – e.g., ‘pending’); determining whether a participant has an exclusive right to trade on the contra order (see Fig 8 and para [0082]-[0083] – e.g., transitioning to the ‘qualified workup state 312’ and determining whether a participant is a qualified current worker, which truly gives the participant exclusive rights to trade); and automatically causing the participant to trade on the contra order when the participant has the exclusive right to trade on the contra order and when another participant indicates a willingness to trade on the contra order (see Figs 3, 8, 10 and para [0102]-[0104], [0114] – e.g., going to ‘price improvement state 314’ via steps 808 and 810 of Fig 8 when another participant, e.g., an aggressor, has indicated a willingness to trade, and consummating the trade if the initial ‘best’ passive trader does not match the new better price, e.g., at step 1022 of Fig 10).

Regarding claim 45, Fraser further discloses in which the participant has no pending order (see para [0048] – e.g., participants are classified based on a metric used to monitor a participant’s activity, and the metric may take into account factors such as the number of trades of a participant, such as the number of existing orders, for example, zero pending orders).

Regarding claim 46, Fraser discloses an apparatus comprising a device operable to perform the method of claim 44 (see Fig 2 and para [0031] – ‘server 206’).

– Please see Supplemental Box –

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

<p style="margin: 0;">International application No. PCT/US 07/60295</p>
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**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Box No. V.2. Citations and explanations:

Regarding claim 47, Fraser discloses a computer readable medium comprising a program that when executed performs the method of claim 44 [see para [0008] – ‘data processing system having control logic’].

Claim 28 lacks an inventive step under PCT Article 33(3) as being obvious over Fraser in view of US 2005/0216393 A1 to Lutnick et al. (hereinafter ‘Lutnick’).

Regarding claim 28, Fraser teaches the method of claim 25 as above and further discloses in which awarding the second participant with exclusive trading priority comprises awarding the second participant with an exclusive right to trade on the incoming contra order if the second participant subsequently enters the order that satisfies the one or more predetermined criteria (see Fig 2, step 8 and para [0074], [0082]-[0083] – e.g., the system temporarily transitions to the ‘qualified worker state 312’ which gives exclusive rights to trade to the initial trader, e.g., the second participant, who is recognized as a qualified current worker able to control the trade by submitting additional transaction volume to its contra-traders to the exclusion of outside participants, e.g., subject to one or more predetermined criteria including reaching a specified limit on the number of workups or amount of workups).

Fraser does not expressly disclose awarding the first participant and the second participant with trading priority comprises awarding the first participant and the second participant with a semi-exclusive right to trade on the incoming contra order. However, Lutnick discloses awarding the first participant and the second participant with trading priority comprises awarding the first participant and the second participant with a semi-exclusive right to trade on the incoming contra order (see Fig 2 – step 240; para [0026] – ‘semi-exclusive rights to the trade may or may not be given’).

One skilled in the art would recognize the benefit of providing participants with various levels of trading priority as well as exclusivity, such as semi-exclusivity. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Fraser and Lutnick so as to utilize a method in which awarding the first participant and the second participant with trading priority comprises awarding the first participant and the second participant with a semi-exclusive right to trade on the incoming contra order, and in which awarding the second participant with exclusive trading priority comprises awarding the second participant with an exclusive right to trade on the incoming contra order if the second participant subsequently enters the order that satisfies the one or more predetermined criteria, because Fraser and Lutnick are directed to systems and methods for electronic trading systems based on states and transitions therebetween. Furthermore, a user would benefit from participants whose status may provide them with various levels of trading priority as well as exclusivity, such as semi-exclusivity (e.g., exclusivity within a small group), exclusivity (e.g., exclusivity to a single participant), and combinations thereof.

Claims 1-47 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.